Form 3160-3 (August 1999)

1a. Type of Work:

1b. Type of Well: Name of Operator

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

APPLICATION FOR PERMIT TO DRILL OR

FORM APPROVED OMB No. 1004-0136 Expires November 30, 2000

5. Lease Serial No.

BIA #11

6. If Indian, Allottee or Tribe Name

JICARILLA APACHE

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

JICARILLA APACHE B 22

9. API Well No. 30-039-

13. State

NM

10. Field and Pool, or Exploratory

BALLARD PICTURED CLIFFS

11. Sec., T., R., M., or Blk. and Survey or Area

NMPM *[*/ 20-24n-5w

Location of Well (Report location clearly and in accordance with any State requirements.*)

☐ REENTER

1950' FSL & 1980' FWL At surface At proposed prod. zone SAME

(Also to nearest drig. unit line, if any)

^{3a.} Address P. O. BOX 189

DRILL

Oil Well Gas Well Other

ELM RIDGE RESOURCES, INC.

FARMINGTON, NM 87499

14. Distance in miles and direction from nearest town or post office* 7 AIR MILES NORTHEAST OF COUNSELORS

16. No. of Acres in lease

2,560

19. Proposed Depth

3b. Phone No. (include area code)

(505) 632-3476

17. Spacing Unit dedicated to this well

RIO ARRIBA

12. County or Parish

SW4 = 160 ACRES

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.

Distance from proposed*

location to nearest property or lease line, ft.

164'

3,300'

2,400'

20. BLM/BIA Bond No. on file

#886441C (BIA - NATION WIDE)

Elevations (Show whether DF, KDB, RT, GL, etc.)

6,660' GL

22. Approximate date work will start* **UPON APPROVAL**

23. Estimated duration

3 WEEKS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

- 1. Well plat certified by a registered surveyor.
- 2. A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized officer.

Comments

The only other well in the quarter-quarter is an Elm Ridge well.

			cc:BIA, BLM (&OCD), Elm (D & F), Tribe				
25. Signature	Blood		Name (Printed/Typed)	BRIAN WOOD	Date 7-28-03		
Title	CONSULTANT	PHONE:	505 466-8120	FAX: 505 466-968	2		
Approved by (S	ignature) [B] David R. Si	izler	Name (Printed/Typed)		APR° 2 9 2004		
Title	Assistant Field Ma	nager	Office	***************************************			
Application ann	royal does not warrant or certify the	the applicant holds log	al or equitable title to those righ	te in the cubiect lance which would	antitle the applicant to conduc		

operations thereon.

Conditions of approval, if any, are attached

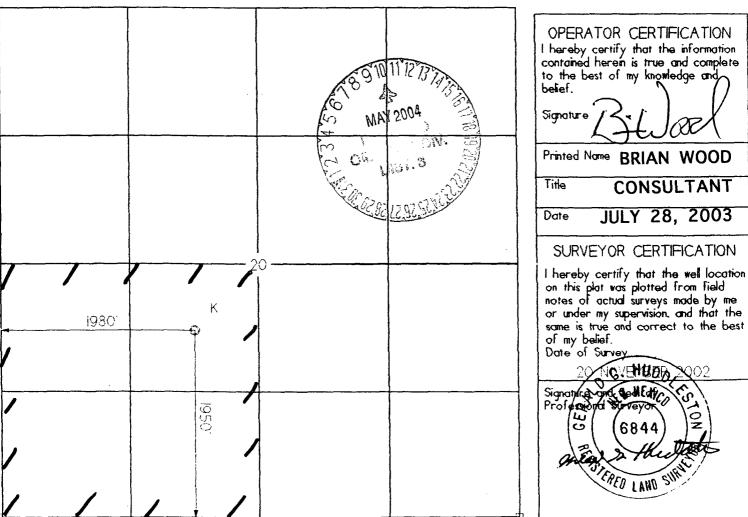
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

State of New Mexico Energy. Minerals & Mining Resources Department OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe. NM 87505

MENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-039-27728		8	Pool Cook 71439	BALLARD PICTURED CLIFFS			FS		
Property Code				Property Name					Well Number
19026			•	• Jicarilla Apache B					22
OGRID No.		Operator Name						Bevation	
149052		ELM RIDGE RESOURCES					6660.		
			· · · · · · · · · · · · · · · · · · ·	····	Surfac	e Location			
UL or Lot	Sec.	Тир.	Rge.	Lot ldn.	Feet from>	North/South	Feet from>	East/West	County
K	20	24 N.	5 W.		1950	SOUTH	1980	WEST	RIO ARRIBA
	<u> </u>			Botton	Hole Locatio	n If Different	From Surface		
UL or Lot	Sec.	Twp.	Rge.	Lot kdn.	Feet from>	North/South	Feet from>	East/West	County
Dedication 160	Jo	int ?	Consolida	tion	Order No.				
	N	KO ALLOWAE					L INTERESTS ! D BY THE DIV	HAVE BEEN CONS ISION	OLIDATED -
						~10 11°12°53			ATOR CERTIFICATION certify that the information I herein is true and complete



Elm Ridge Resources, Inc. Jicarilla Apache 8 #22 1950' FSL & 1980' FWL Sec. 20, T. 24 N., R. 5 W. Rio Arriba County, New Mexico

Drilling Program

1. ESTIMATED FORMATION TOPS

Formation Name	GL Depth	<u>KB Depth</u>	<u>Elevation</u>
San Jose	000'	5'	+6,660'
Kirtland-Fruitland	2,012'	2,017'	+4,648'
Pictured Cliffs Ss	2,272'	2,277'	+4,388'
Lewis Shale	2,359'	2,364'	+4,301'
Total Depth (TD)*	2,400'	2,405'	+4,260'

^{*} all elevations reflect the ungraded ground level of 6,660'

2. NOTABLE ZONES

Oil & Gas Zones	<u>Water Zones</u>	<u>Coal Zones</u>
Ojo Alamo	San Jose	Fruitland
Pictured Cliffs		

Water zones will be protected with casing, cement, and weighted mud. Fresh water encountered during drilling will be recorded by depth, cased, and cemented. Oil and gas shows will be tested for commercial potential based on the well site geologist's recommendations.

3. PRESSURE CONTROL

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. (A typical 2,000 psi model is on PAGE 3.) BOP and choke manifold system will be installed and tested to 500 psi before drilling surface casing plug. It will remain in use until the well is completed or abandoned. A safety valve and sub with a full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for



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use when kelly is not in use.

All BOP mechanical and pressure tests will be recorded on the driller's log. BOPs will be inspected and opened and closed at least daily to assure good mechanical working order. Inspections will be recorded on the daily drilling report. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place.

4. CASING & CEMENT

Hole Size	<u>O. D.</u>	Weight (lb/ft)	<u>Grade</u>	<u>Type</u>	<u>Age</u>	GL Setting Depth
8-5/8"	7"	23	K-55	ST&C	New	250'
6-3/4"	4-1/2"	10.5	J-55	LT&C	New	2,400'

Surface casing will be cemented to the surface with ≈ 70 cubic feet (≈ 60 sacks) Class B with 1/4#/sk Flocele + 2% CaCl₂. Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume = 100% excess. Centralizers will be installed on the middle of the shoe joint and every other centralizer thereafter. Thread lock the guide shoe and bottom of float collar only. Use API casing dope.

Production casing will be cemented to the surface with ≈ 590 cubic feet (≈ 500 sacks) Class B with 1/4#/sk Flocele + 2% CaCl₂. Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume = 75% excess. At least six centralizers will be used.

5. MUD PROGRAM

A nine pound polymer and fresh water mud system with a viscosity of ≈35 will be used. Sufficient material to maintain mud properties, control lost circulation, and contain a blowout will be available at the well while drilling.



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6. CORING, TESTING, & LOGGING

No cores or drill stem tests are planned. DIL/GR log may be run from TD to surface. CNL/FSC log may be run over certain intervals.

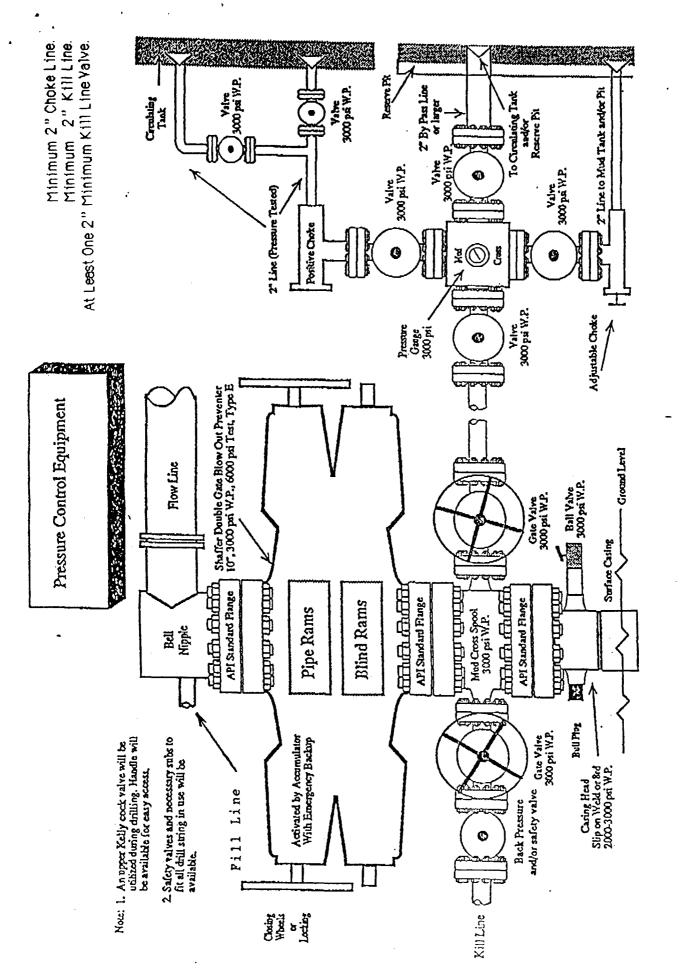
7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum pressure will be \leq 960 psi.

8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take ≈ 1 week to drill and ≈ 2 weeks to complete the well.





Note: This equipment is designed to meet requirements for a 2-M rating standard per 43 CFR part 3160 (amended). Proper operation and testing of equipment will be caried out per standard, 2,000 psi equipment can be substituted in the drawing to meet minimum requirements per standard.

